

Please amend the instant application as follows:

In the Claims:

Please cancel claims 56 and 57.

Sub B1 58. (amended) A Chemical-Mechanical Polishing (CMP) method for polishing Ta barrier layers in integrated circuit metallization structures including copper and silica, said method including flowing polishing slurry containing silica abrasive, DI water, and a copper passivation agent, onto a platen, inducing relative motion between said wafer and said platen and maintaining a force between said platen and said wafer, and removing said wafer from against said platen, said polishing occurring for a total polishing period of time, comprising,

A1 incorporating into said polishing slurry for a final portion of said total polishing period of time less than or equal to 10% of said total polishing period of time, an organic additive selected from the group consisting of:

polyvinyl alcohol (PVA), PVA-poly(vinyl acetate) co-polymer, PVA-polyethylene co-polymer, sorbitol, glycerol, polyacrylamide (PAA), ethylene glycol, di(ethylene glycol), poly(ethylene glycol) (PEG), glycerol ethoxylate (GEO), dimethylsiloxane-ethylene oxide co-polymer (DMSiO-EO), polyethylene oxide surfactants, octylphenol polyethylene oxide, nonylphenol polyethylene oxide, polyoxyethylene lauryl ether, polyoxyethylene cetyl ether, perfluorinated analogs of polyethylene oxide surfactants, glycerol propoxylate (GPO), organic amines, N,N-diethylcyclohexylamine (DCA), and polyethyleneimine (PEI).

Sub 2
63. (amended) In a Chemical-Mechanical Polishing (CMP) method for polishing Ta barrier layers in integrated circuit metallization structures including copper and silica, said method including flowing polishing slurry containing silica abrasive, DI water, and a copper passivation agent onto a platen, inducing relative motion between said wafer and said platen while maintaining a force between said platen and said wafer, and removing said wafer from against said platen, said polishing occurring for a first polishing period of time, the improvement comprising:

decreasing said flow of said polishing slurry prior to said step of removing said wafer from against said platen; and

following said step of decreasing said flow of said polishing slurry and prior to said step of removing said wafer from against said platen, flowing a polishing additive solution onto said platen for a second period of time while inducing relative motion between said wafer and said platen and maintaining a force between said platen and said wafer;

A2
said polishing additive solution comprising;

DI water;

a copper passivation agent selected from the group consisting of, 1,2,4-triazole, benzotriazole (BTA), imidazole, 5-methyl benzimidazole, polyaniline, indazole, and purine; and

an organic additive selected from the group consisting of, polyvinyl alcohol (PVA), PVA-poly(vinyl acetate) co-polymer, PVA-polyethylene co-polymer, sorbitol, glycerol, polyacrylamide (PAA), ethylene glycol, di(ethylene glycol), poly(ethylene glycol) (PEG), glycerol ethoxylate (GEO), dimethylsiloxane-ethylene oxide co-polymer (DMSiO-EO), polyethylene oxide surfactants, octylphenol polyethylene

A2 end

oxide, nonylphenol polyethylene oxide, polyoxyethylene lauryl ether, polyoxyethylene cetyl ether, perfluorinated analogs of polyethylene oxide surfactants, glycerol propoxylate (GPO), organic amines, N,N-diethylcyclohexylamine (DCA), and polyethyleneimine (PEI).
